Avian Diseases

Honorary Lifetime Editor
P. P. LEVINE

L. C. GRUMBLES, *Editor*
R. F. GENTRY, *Associate Editor*

Editorial Board

J. N. BEASLEY
B. R. BURMESTER
B. W. CALNEK
F. R. CRAIG
J. FABRICANT
T. N. FREDRICKSON
M. L. FREY
R. P. HANSON
K. L. HEDDLESTON
C. F. HELMBOLDT
W. HENDERSON
S. B. HITCHNER
M. S. HOFSTAD
K. M. KERR
W. M. REID
G. H. SNOEYENBOS
J. E. WILLIAMS
R. W. WINTERFIELD
R. L. WITTER
H. YODER, JR.

Business Manager
C. F. HALL

VOL. XV
ITHACA, NEW YORK
1971

AUTHOR INDEX

A

Adams, N. R. 426
Adams, W. R. 533
Adldinger, H. K. 508
Al-Hilly, Jaafir N. Abbood 419
Anderson, D. P. 68, 312, 434, 551
Aronovici, I. 413
Arya P. L. 163
Aycardi, E. R. 434

B

Ball, R. A. 32, 42
Bankowski, R. A. 242
Barber, T. L. 125
Barrett, James T. 7
Bauernfeind, J. C. 884
Baxter-Gabbard, K. L. 837, 850, 863
Beard, Charles W. 334
Beasley, J. N. 680
Bendheim, U. 413
Bickford, A. A. 614
Bigland, C. H. 82, 254, 406, 572, 604
Bolte, H. 614
Braune, M. O. 638, 648
Breitenbach, Robert P. 7
Brewer, Robert N. 203
Brown, J. 312
Brown, J. L. 923
Brownell, J. R. 366
Bryant, E. S. 775
Burg, R. W. 662
Burmester, B. R. 745, 753

C

Calnek, B. W. 467, 508
Calpin, Janet P. 704
Campbell, W. F. 837, 850
Champion, L. R. 346
Chute, M. B. 342
Coria, M. F. 22, 688, 696
Cover, M. S. 609
Cowen, B. S. 518, 527
Crinion, R. A. P. 32, 42
Crittenden, L. B. 503
Cunningham, C. H. 923
Cuperstein, E. 413

D

Damron, B. L. 284
Davis, R. B. 935
Deshmukh, Damodar R. 588
Domermuth, C. H. 94
Donahue, J. M. 158, 901
Drury, L. N. 596
Dutta, Sukanta K. 588

E

Edgar, S. A. 203
Eidson, C. S. 68, 312
Ellnor, J. A. 406
Estupinan, Jaime 798, 805
Evans, D. L. 680

F

Fabricant, J. 125
Fadly, A. M. 56, 305
Fanelli, M. J. 366
Feldbush, T. 662
Ferguson, L. C. 448
Fernando, M. A. 89
Fernando, W. W. D. 467
Franti, C. E. 366

G

Gallina, A. M. 614
Garg, R. R. 1
Gautam, O. P. 1
Gentry, R. F. 638, 648
Gerloff, Robert K. 789
Greenfield, J. 82, 254, 406, 572, 604
Grimson, R. E. 398
Gross, W. B. 94, 716
Gupta, B. N. 408

H

Hall, C. F. 14
Halliwell, William H. 49
Hanley, J. E. 305
Hanson, R. P. 434, 798, 805
Hardie, Arden 737
Harms, R. H. 284
Helmboldt, C. F. 262, 775
Higgins, D. A. 98
Hitchner, S. B. 518, 527, 894
Hofstad, M. S. 32, 42, 426, 688, 696
Holly, Elizabeth A. 939
Hopkins, S. R. 596
Howell, J. 557

I

Ianconescu, M. 177, 745

J

Johnson, D. C. 829, 835
Johnson, R. B. 233
Jortner, B. S. 533

K

Kamada, Masanobu 326
Katz, D. 187, 212
Kaye, M. M. 557
Kellogg, Forest E. 704

Kenyon, A. J. 672
Kleven, Stanley H. 291, 299, 312, 551, 824
Kohn, A. 187, 212
Koski, T. A. 150, 422
Kumar, M. C. 221

L

Lee, Lucy F. 565
Levine, Alvin S. 837, 850, 863, 874
Lewis, D. H. 14
Lucio, Benjamin 518
Lukert, P. D. 935

Mc

McCausland, H. D. 82
McDowell, J. R. 221
McKenzie, Basil E. 737
McLoughlin, D. K. 342

M

Maag, T. A. 662
Marquardt, W. W. 139
Marty, E. W. 277
Matsumoto, M. 109
Mikami, T. 242
Miller, Louise T. 781, 789
Mitrovic, M. 884
Miura, Shiro 326
Miyamae, Takeo 326
Mohamed, Y. S. (*see* Saif, Y. Mohamed)
Morales, G. A. 262
Morgan, Herbert R. 611
Morris, C. A. 662
Mussman, Harry C. 483

N

Naqi, S. A. 14
Nazerian, K. 346
Nestor, K. E. 448
Newman, J. A. 139, 233

O

Okazaki, W. 391, 745, 753
Olesiuk, Olga M. 118
Olmsted, J. 672
Olsen, G. V. 398
Olson, L. D. 158, 629, 901
Oshel, D. D. 150, 422

P

Padgett, Frank 850, 863
Paredes, Francisco 609
Patterson, L. T. 680
Penner, L. R. 262
Peterson, David A. 874
Peterson, J. K. 22
Pinedo D., C. 835
Polewaczyk, D. E. 477
Pomeroy, Benjamin S. 163, 221, 291, 299, 588, 824
Purchase, H. G. 391, 745, 753

R

Raitano-Fenton, Anita 850, 863
Ratzsch, D. 503
Remmler, O. 89
Rhoades, Keith R. 722, 762, 910
Riddell, C. 398, 557
Rigney, Mary M. 7
Rossi, C. R. 730

S

Sadler, W. W. 366
Saif, Y. Mohamed 448
Samberg, Y. 177, 413
Sato, Gihei 326
Sautter, J. H. 163
Schettler, C. H. 323, 809
Seneviratna, P. 654
Simpson, Charles F. 284
Smith, L. DS. 716
Smyser, C. F. 118, 581
Snoeyenbos, G. H. 28, 118, 581
Solomon, J. J. 346
Stockdale, P. H. G. 89
Stone, H. A. 939

T

Taylor, H. W. 629
Taylor, Lewis W. 376
Trapp, A. L. 408
Twiehaus, Marvin J. 483

U

Ubertini, Tito 527

V

van der Heide, L. 829
Vardaman, Thomas H. 102, 462

W

Watrach, A. M. 730
Wendel, E. J., Jr. 503
Wenger, D. R. 150, 422
Wijewanta, E. A. 654
Will, James A. 737
Winans, R. E. 277
Winterfield, R. W. 56, 305, 614
Witter, R. L. 346

Y

Yamamoto, R. 109
Yates, Vance J. 781
Yoder, Harry W., Jr. 462
York, M. D. 221

Z

Zolli, Z., Jr. 477

SUBJECT INDEX

A

AAAP annual meeting report 626
acute runting syndrome in chicks 483
adenoviruses, reactions to
in human sera 781
airsacculitis, spectinomycin vs 477
airsacculitis from *Mycoplasma meleagridis*, pathogenesis and histopathology 163
annual meeting report, AAAP 626
antibiotics
translocation in embryos 572
assay of activity in vaccines 422
arizona
in eggs, antibiotics vs 254
in eggs, treatment 448
isolating from competitive bacteria 604
isolating from turkey eggs 82
Ascaridia galli in chicken, immunity development 203
authors' instructions 200, 996
avian reticuloendotheliosis strain T
biochemistry 850
infectivity 212, 629
transmissibility 874
virology 837
ultrastructure 863

B

biocontamination of vaccines, monitoring 150
bluecomb (*see* enteritis, infectious)
bobwhite (*see* quail)
bursa of Fabricius, influence on Marek's disease 467
bursal disease, infectious, antibody persistence 894
botulism in gallinaceous birds 716

C

Cassia occidentalis seeds, toxicity 284
chlamydia, reactions to in human sera 789
chlortetracycline vs *Mycoplasma synoviae* 551
cholera (see *Pasteurella multocida*)
Clostridium botulinum in gallinaceous birds 716
Clostridium perfringens, bacteriology of fatal type-A strains 654
coccidiosis (see *Eimeria*)
Colinus virginianus (*see* quail)
coryza, infectious, broth bacterins vs 109

D

decoquinate vs *Eimeria tenella* 342
dihydrostreptomycin vs arizona in turkey eggs 254
2,4-dimethoxy-6-sulfanilamide-1,3-diazine (*see* sulfadimethoxine)
dimethyl sulfoxide effects on herpesvirus in culture 242
disease reports
North Central 966
Western States and Western Canada 946
Northeastern Area 959
Southern Area 981
dyschondroplasia, tibial, in broilers 557

E

egg-punch, injecting needle for 406
Eimeria, sulfadimethoxine vs 884
Eimeria tenella, decoquinate vs 342
electrocardiogram of the turkey 737
encephalomyelitis
detection of antibodies 935
pathogenesis in chickens 648
pathogenesis in embryos 638
propagation of virus 326
enteritis
hemorrhagic, in turkey 94
necrotic, pathology in chickens 775
transmissible, isolating agent 426
infectious, in turkey 14
erythromycin vs *Mycoplasma synoviae* 551
Escherichia coli, spectinomycin vs 477

F

fatty liver and kidney syndrome 398
fowl cholera (see *Pasteurella multocida*)

G

gizzard, erosion and ulceration in Peru broilers 835
goose
virus hepatitis in 809
with hepatitis, parvovirus (?) isolated from 323
guidelines for authors 200, 996

H

hepatitis
in goose, parvovirus (?) isolated from 323
goose virus 809

herpesvirus
in culture, dimethyl sulfoxide effects 242
of turkeys, vs spread of Marek's disease 391
vaccination effects on Marek's disease 753
Hickman strain (*see Newcastle* disease)

I

infectious bronchitis virus
abnormalities in layers 42
immune response to 688, 696
measuring strain variability 233
oviduct lesions with 32
virus adaptation and propagation 22
criteria for immune response 56
isolate from chickens, characteristics 305
new isolate, properties 527
new isolate, serology 518
with Newcastle disease in cell culture 923
infectious enteritis (*see* enteritis)
inflammation in chicken induced by turpentine 533

K

kanamycin
vs arizona in turkey eggs 254
translocation in embryos 572
kidneys, enlarged, in syndrome of broilers 398
kyphoscoliosis in chickens, long-term selection 376

L

laryngotracheitis
immunizing chickens 413
vaccine against, characteristics 277
virus growth in cell culture 730
leukemia, lymphoblastic (JM-V), transplantability 672
leukosis
(*see also* avian reticuloendotheliosis strain T)
in chicken, detection 212
lymphoid, biocontaminating vaccines 150
Leukosis-sarcoma group, susceptibility phenotype determination 503
lincomycin vs *Mycoplasma synoviae* 551
litter inhibition of *Salmonella typhimurium* transmission 118
livers, fatty, in syndrome of broilers 398

M

malaria (see *Plasmodium lophurae*)
Marek's disease
antibodies for in fowl in Kenya 611
agar-gel precipitin test 939
cell-free preparations of 508
challenge after natural exposure 745
effect of herpesvirus vaccination on 753
immunization against 68
immunology correlated with lesions 680
immunology in chicks 662
in culture, dimethyl sulfoxide effects on 242
in great horned owl, lesions 49
infection and pathology 467
isolating and identifying 187
large-scale production of virus 565
long-term studies in individual chickens 346
precipitating antibodies in commercial flocks and eggs 177
spread in turkeys 391
vaccines vs in field trials 312
mycoplasma
antibody detection 139
classification 434
reactions to in human sera 789
serotype reclassification 125
Mycoplasma meleagridis
in poults, lesions 910
in poults, antibody response 824
in turkey, antibody response 291
in turkey, egg transmission 299
in turkey, lesions 722
in turkey, pathogenesis 163
in turkey embryos, lesions 762
Mycoplasma synoviae
antigen preparation 462
eight antibiotics vs 551
hemagglutinating antigens 102

N

neomycin vs *Mycoplasma synoviae* 551
Newcastle disease
air filters vs transmission 596
avirulent isolate as vaccine 334
embryo inoculation 98
mutant strains 798, 805
reactions to in human sera 781
with infectious bronchitis virus in cell culture 923
North Central States disease reports 966
Northeastern States disease reports 959

O

Ornithobilharzia canaliculata in chickens, schistosome dermatitis from 262
oxytetracycline vs *Mycoplasma synoviae* 551
owl, Marek's disease lesions in 49
ownership statement 1000

P

parvovirus (?) isolated from geese with hepatitis 323
Pasteurella multocida
  isolates from turkey 901
  method of exposing turkeys 158
  sulfadimethoxine vs 884
peafowl, *Clostridium botulinum* in 716
Peru broilers, gizzard ulceration of 835
penicillin
  translocation in embryos 572
  vs arizona in turkey eggs 254
pheasant
  Clostridium botulinum in 716
  Syngamus trachea in 89
Plasmodium lophurae, Salmonella typhosa endotoxin vs 7
pox, unusual infection in turkeys 614
proventriculitis, traumatic, in a rhea 408

Q

quail, bobwhite, parasites and diseases 704

R

reoviruses, ultrastructural morphology 588
reticuloendothelial virus in chicks
  infectivity 212, 629
  pathogenesis 483
rhea, traumatic proventriculitis in 408
roundworm (see *Ascaridia galli*)
Rous sarcoma virus genome rescue test for leukosis viruses 212
runting, acute syndrome in chicks 483

S

salmonella
  chickens free of, identifying and maintaining 28
  in chicken, localization in intestinal tract 366
  in turkey, dynamics of infection 221
  isolating from rendered by-products 581
Salmonella typhimurium, litter inhibition of transmission 118
Salmonella typhosa endotoxin vs *Plasmodium lophurae* 7
schistosome dermatitis in chicken from *Ornithobilharzia canaliculata* 262
Southern States disease reports 981
spectinomycin
  vs airsacculitis from *Escherichia coli* 477
  vs arizona in turkey eggs 254
  vs *Mycoplasma synoviae* 551
spirochetosis
  determining antibodies to 419
  serological diagnosis 1
statement of ownership 1000
streptomycin
  translocation in embryos 572
  vs arizona in turkey eggs 254
style guide for writers 200, 996
sulfadimethoxine vs turkey diseases 884
Syngamus trachea in pheasant, stimulating immunity 89

T

techniques
  assay of antibiotic activity in vaccines 422
  detecting leukosis viruses 212
  determining antibodies to spirochetosis 419
  determining phenotype for resistance to leukosis-sarcoma group 503
  egg-punch injecting needle 406
  evaluating agents vs fowl cholera 158
  inoculating *Pasteurella multocida* in turkeys 158
  isolating arizona 82, 604
  isolating transmissible enteritis agent 426
  large-scale production of Marek's disease virus 565
  preparing *Mycoplasma synoviae* antigen 462
  propagating encephalomyelitis virus 326
  propagating IBV 22
  trachea culture to measure variability of IBV strains 233

yolk-sac inoculation for isolating and identifying Marek's disease 187
tenosynovitis incidence in Maine broilers 829
tetracycline vs *Mycoplasma synoviae* 551
tibial dyschondroplasia in broilers 557
turpentine inducing inflammation in chicken 533
T-virus (*see* avian reticuloendotheliosis strain T)
Twiehaus leukosis virus (*see* avian reticuloendotheliosis strain T)
tylosin vs *Mycoplasma synoviae* 551

U

ulceration, perforating ventricular 609

V

virus isolated from geese with hepatitis 323
vomito negro, broiler disease in Peru 835

W

Western States and Western Canada disease reports 946